REMARKS

The Examiner has further rejected the claims under 35 U.S.C. 102(e) and 35 U.S.C. 103(a). The claims have been amended to correct typographical errors and to further clarify the subject matter regarded as the invention. Claim 30 has been cancelled. Claims 1-29 and 31-38 remain pending.

Reconsideration of the application is respectfully requested based on the following remarks.

REJECTION OF CLAIMS UNDER 35 USC §102

The Examiner has rejected claims 1, 2, 6, 8, 12-18, 21-24, 27, and 33-36 under 35 U.S.C. 102(e) as being anticipated by Shimoda et al, U.S. Patent No. 7,203,517, ('Shimoda' hereinafter). This rejection is fully traversed below.

Shimoda discloses a mobile communication terminal device which includes a plurality of different communication interfaces that are automatically switched for making a communication. The stable connection is ensured whether the terminal device remains at rest or is moving by monitoring positional information on the terminal device for a moving situation thereof to control a selection from a plurality of physical interfaces. See Abstract.

The Examiner cites FIG. 6(b) and col. 7, lines 9-16 of Shimoda. As shown in FIG. 6(a), it is determined whether the device is on the move, and if so, whether it is moving at a high speed. As described in col. 7, lines 33-35 of Shimoda, the switching determination unit selects a physical interface from available interfaces based upon rest-state priorities shown in FIG. 6(b). A different set of priorities are associated with the "rest-state" "high speed

moving state," and "low speed moving state," as shown in FIG. 6(b). Each set of priorities as shown in FIG. 6(b) prioritizes a wireless LAN, PHS, and portable telephone.

Shimoda discloses determining whether the mobile device is moving at a high speed. However, Shimoda fails to disclose or suggest detecting an actual speed of the mobile network device and using this speed to identify values of operating characteristics of interfaces corresponding to that speed. Thus, Shimoda fails to provide the precision of the claimed invention. Accordingly, Shimoda fails to enable a mobile network device to optimize performance as provided by the interfaces of the mobile network device.

Claim 1, as amended, recites in part:

ascertaining one or more values of one or more operating characteristics of ~~one~~ each of two or more interfaces of the mobile network device, the one or more values of the one or more operating characteristics of each of the two or more interfaces corresponding to the speed of the mobile network device; and

selecting one of the two or more interfaces using the values of the one or more operating characteristics of each of the two or more interfaces at the speed of the mobile network device, the selected one of the two or more interfaces having a desired set of values of the operating characteristics at the speed of the mobile network device.

It is important to note that Shimoda neither discloses nor suggests ascertaining one or more values of one or more operating characteristics of interfaces in any manner. Rather, once it is determined that the device is moving at a high speed, low speed, or is at rest, the

interface is selected based upon a set of priorities that has been pre-established. Thus, the only information that is dynamically obtained in order to select an interface is whether the device is moving, and if so, whether it is moving at a high speed.

. Moreover, Shimoda similarly fails to disclose or suggest selecting an interface using values of operating characteristics that have been ascertained. In fact, Applicant was unable to find any values in Shimoda that could be interpreted as operating characteristics. Although FIG. 6(b) illustrates sets of priorities, Applicant respectfully submits that priorities associated with interfaces are not values of operating characteristics. Accordingly, Applicant asserts that Shimoda neither discloses nor suggests selecting an interface based upon operating characteristics or values of operating characteristics of an interface at a particular speed of the mobile network device.

The dependent claims depend from one of the independent claims and are therefore patentable for at least the same reasons. However, the dependent claims recite additional limitations that further distinguish them from the cited reference. The additional limitations recited in the independent claims or the dependent claims are not further discussed, as the above discussed limitations are clearly sufficient to distinguish the claimed invention from the cited reference. Thus, it is respectfully requested that the Examiner withdraw the rejection of claims 1, 2, 6, 8, 12-18, 21-24, 27, and 33-36 under 35 USC §102(e).

REJECTION OF CLAIMS UNDER 35 USC §103

The Examiner has rejected claims 3-5, 7, and 9 under 35 U.S.C. 103(a) as being unpatentable over Shimoda in view of Johnson et al, U.S. Patent No. 6,625,135, ('Johnson' hereinafter). This rejection is fully traversed below.

The Examiner admits that Shimoda fails to disclose registering with a Home Agent via the selected interface. Applicant respectfully asserts that Johnson fails to cure the deficiencies of Shimoda. Moreover, the combination of the cited references would fail to operate as claimed. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection of claims 3-5, 7, and 9 under 35 U.S.C. 103(a).

The Examiner has further rejected claims 10, 11, 19, 20, 25, 26, and 28 under 35 U.S.C. 103 as being unpatentable over Shimoda in view of Uchida et al, U.S. Patent No. 6,618,596, ('Uchida' hereinafter). This rejection is respectfully traversed.

The Examiner admits that Shimoda does not specifically disclose wherein the operating characteristics include at least one of bandwidth, quality of service, and percentage or fraction of the bandwidth allocated to one or more types of traffic.

The Examiner cites col. 3, line 62 – col. 4, line 29 of Uchida. Uchida discloses a moving speed calculation section for calculating the moving speed of the mobile terminal. The mobile terminal includes a data transfer rate input section for inputting a desired data transfer rate when data is to be transmitted, a comparing section for reading out the current moving speed of the mobile terminal from the moving speed calculation section/storage section, reading out the maximum data rate which corresponds to the current moving speed of the mobile terminal and is permitted by the mobile communication system in an air interval from a moving speed/maximum data rate correspondence table, comparing the readout maximum data transfer rate with the desired data transfer rate input by the data transfer rate input section, and outputting the lower data rate…See col. 3, lines 62 – col. 4, line 29 of Uchida.

Applicant was unable to find a reference in Uchida to bandwidth, quality of service, or percentage or fraction of the bandwidth allocated to one or more types of traffic. Moreover, Uchida fails to disclose or suggest that the bandwidth, quality of service, or percentage or fraction of the bandwidth allocated to one or more types of traffic would vary with the speed of the network device. It is also important to note that Uchida fails to disclose or suggest that such values or values of other operating characteristics would vary with the speed of the network device on a per-interface basis.

Even if Shimoda and Uchida were combined, the combination of the cited references fail to disclose or suggest:

ascertaining one or more values of one or more operating characteristics of ~~one~~ each of two or more interfaces of the mobile network device, the one or more values of the one or more operating characteristics of each of the two or more interfaces corresponding to the speed of the mobile network device; and

selecting one of the two or more interfaces using the values of the one or more operating characteristics of each of the two or more interfaces at the speed of the mobile network device, the selected one of the two or more interfaces having a desired set of values of the operating characteristics at the speed of the mobile network device.

It follows that the combination of the cited references would fail to disclose or suggest such a system or method in which the values of such operating characteristics are ascertained and used to select an interface. Accordingly, Applicant respectfully asserts that claims 10, 11, 19, 20, 25, 26, and 28 are patentable over the cited references.

The Examiner has rejected claim 32 under 35 U.S.C. 103(a) as being unpatentable over Uchida in view of Johnson. This rejection is fully traversed below.

The Examiner admits that Uchida fails to disclose or suggest that the mobile network device is a Mobile Router. However, it is important to note that the Mobile Router may support multiple network devices (e.g., Mobile Nodes) or networks via its various interfaces. Since multiple network devices may each wish to connect to various devices or networks via the Mobile Router, it is particularly advantageous for the Mobile Router to be able to select an interface that provides optimum performance. The cited references, separately or in combination, fail to disclose or suggest the advantages of using values of operating characteristics of interfaces at the speed of the mobile network device in order to select an interface. Accordingly, Applicant respectfully asserts that claim 32 is patentable over the cited references.

The dependent claims depend from one of the independent claims and are therefore patentable for at least the same reasons. However, the dependent claims recite additional limitations that further distinguish them from the cited references. The additional limitations recited in the independent claims or the dependent claims are not further discussed, as the above discussed limitations are clearly sufficient to distinguish the claimed invention from the cited references. Thus, it is respectfully requested that the Examiner withdraw the rejection of the claims under 35 USC §103.

SUMMARY

If there are any issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Applicants hereby petition for an extension of time which may be required to maintain the pendency of this case, and any required fee for such extension or any further fee required in connection with the filing of this Amendment is to be charged to Deposit Account No. 50-0388 (Order No. CISCP358).

Respectfully submitted,
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